

AMENDMENTS TO THE SPECIFICATION

Please amend page 5, line 20 through page 7, line 5, as follows:

In Figure 1, an upper jaw bone is represented by 1. A hole 2 with an internal thread has been formed in the jaw bone. An implant 3 has been fitted in the hole in the jaw bone, its front parts [[4a]].4 passing into a sinus 5. The insertion in this case is such that the front parts 4 have lifted the mucous membrane 6 of the sinus by means of the implant's front parts 4 cooperating with the mucous membrane at the underside 6a thereof. It is important here that the lifting is done in such a way that the mucous membrane 6 is not pierced by the implant or is not damaged in a way which would involve a risk of its later becoming pierced. The lifting of the mucous membrane 6 results in an enclosed space 7 being formed between the underside 6a of the mucous membrane and the outer surface 4a of the outer parts. Body fluid 8 passes into the enclosed space from the body tissue in accordance with arrows 9 and 10. At least said front parts 4 of the implant are provided, on said outer surface 4a, with growth-stimulating substance or substances which interact with said body fluid 8. The substance or substances are initially applied in a specific amount and concentration on said surface 4a, and said interaction from said layer is represented in the figure by arrows 10. In Figure 1, the formation of new bone has been symbolized by 11. Two stages have been indicated in the figure. In the first stage (see to the left of the front-surface 4a parts 4), the body fluid accumulation and the initial interaction are indicated. In the second stage (see to the right of the front parts 4), the completed formation of new bone is indicated. The figure also shows an inner surface 1a of the upper jaw bone, against which inner surface the underside 6a of the mucous membrane 6 bears before lifting. The implant can be of the self-tapping type or of the type fitted in a previously formed thread in the jaw bone hole 2. In Figure 1, parts of an outer thread on the implant 3 have been indicated by 3a. Other parts of the implant can also be provided with amounts or concentrations of growth-stimulating substance or substances lying on the outside. Application of GSS to the implant 4 can be carried out in different ways, and with variations as regards the extent of the substance or substances along the length and circumference of the implant. The implant has a length L in accordance with the above. The height or length L' of the dentine can vary as a function of the patient, jaw bone

status, etc. The degree of insertion of the implant, i.e. L-L', is dependent inter alia on the length or height L'. If the length or height is small, it may be important to increase stability by means of the new bone formation in the closed space 7, which in such a case entails a greater degree of insertion of the front parts 4a of the implant. The implant can be anchored to the jaw bone 1 temporarily or permanently using a mechanical securing arrangement 12, for example a stiff membrane, which is secured with screws 13 in the jaw bone, at the outer surface 1b thereof. Alternatively, or in addition to this, the membrane or reinforcement can be secured by a screw 12' which is screwed into an inner threaded hole in the implant. The design of the implant itself can be of a type known per se, and in this connection reference may be made to the "Brånemark" system.

Please amend page 7, lines 7 - 18, as follows:

Figure 2 is an enlarged view showing the configuration of the front surface-parts 4 in Figure 1. The surface of front surface-parts 4 is designed with an evenness which avoids mechanical impact on the mucous membrane when the implant is inserted into the sinus. The surface of front surface-parts 4 can have a polished part 14 and, if appropriate, can be designed with a surface roughness or porous layer 14a at the sides. The surface roughness or porous layer in this case functions as a reservoir for layers of GSS. The parts 4' contiguous to the front surface-parts 4 can also be provided with said surface roughness or porous layer and can be charged with said GSS.

Please amend page 7, lines 20 - 23, as follows:

Figure 3 shows the surface roughness 14 on the front surface-parts 4 in an enlarged view compared to Figure 2. A layer of GSS applied to the surface roughness is indicated by 15.

Please amend page 7, lines 25 - 33, as follows:

In accordance with the above, the rest of the implant 3 can be coated completely or partially with GSS of a chosen amount and concentration [[16]] 17. The thickness of the applied GSS can, for

example, lie in the range of, for example, a few Ångström to a few micrometers, a few nanometers. In the example according to Figure 4, a coating has been applied to an outer thread 16 with a GSS amount or GSS concentration 17. In the figures, the GSS has been symbolized by broken lines 15, [[16]] 17.

Please amend page 7, line 35, traversing page 8, line 2, as follows:

In accordance with Figure 5, the front surface-parts 4' can be designed in different ways. The front surface can be substantially plane or form an only slightly rounded front surface 18 which, at its periphery, has been provided with bevels 18a, 18b so as not to cause damage to the aforementioned mucous membrane 6.

Please amend page 8, lines 4 - 6, as follows:

Figure 6 shows a further embodiment of the front surface-parts 4''', which in this case has the basic shape of a sphere 19.

Please amend page 8, line 8, traversing page 9, line 5, as follows:

In accordance with Figure 7, the mucous membrane 6 can, at its underside 6a, be more or less firmly attached to or in the inner surface 1a of the upper jaw bone 1. In this case it is advantageous to use a certain release function. The purpose of the release function is to free the mucous membrane 6 from the inner surface 1a before the lifting in accordance with Figure 1 is carried out. Said release can be done with the aid of an instrument or member 20 which at its front part has a blade-shaped part 21. After passing through the jaw bone hole [[22]] 2, said part 21 can be driven in between the inner surface 1a of the jaw bone and the underside 6a of the mucous membrane 6 so as to effect a release function between the jaw bone and the mucous membrane. Figure 7 shows this initial stage. The member 20 can be given a rotation movement 22 about its longitudinal axis 23, which results in the mucous membrane 6 being freed from the inner surface 1a around the mouth 2a where the jaw bone hole opens into the sinus. In Figure 7,

an initial stage for formation of the space 7 in Figure 1 has commenced. The initial space which has been created with the member 20 in the stage shown in Figure 7 has been indicated by 7'. It will be appreciated that the member 20 and its insertion and releasing parts 21 can be designed in different ways. Thus, the member 20 can be provided with several parts 21. The parts can be arranged to be resilient relative to the longitudinal part 24 of the member. The part or parts 21 can be provided with rounded surfaces cooperating with the mucous membrane 6 so that the latter is not damaged by the member 20 during the initial release. The invention has been described above such that the mucous membrane 6 is considered as belonging to the sinus, like any space between the underside 6a of the mucous membrane and the top surface 1a of the jaw bone.